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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,025	08/21/2003	George T. Chaney	T-0101.03 (DIV)	7324

7590 11/29/2004

LAW OFFICES OF CHRISTOPHER L. MAKAY
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San Antonio, TX 78205

EXAMINER

AVERY, BRIDGET D

ART UNIT	PAPER NUMBER
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3618

DATE MAILED: 11/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/645,025

Applicant(s)

CHANEY, GEORGE T.

Examiner

Bridget Avery

Art Unit

3618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-27 and 29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-27 and 29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The preliminary amendment filed by applicant on August 16, 2004 is acknowledged and has been entered.
2. An action on the merits of claims 25-27 and 29 follows.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 25-27 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver et al. (US Patent 3,760,770) in view of Chase, Jr. (US Patent 5,760,569).

Weaver et al. teaches an electric vehicle including a chassis defining a battery module compartment, and a battery module insertable into the battery module compartment of the chassis, where the battery module completes the chassis upon insertion into the battery module compartment thereby providing the chassis with required structural integrity necessary to support the electric powered vehicle during travel. Note, Weaver teaches a recharging receptacle that allows the batteries to be charged from an appropriate recharging unit.

Weaver et al. lacks the teaching of a method of replacing a battery module and the teaching of a service facility.

Chase, Jr. teaches a method (see column 4, lines 59-60) of replacing a battery module (32, 34) of an electric powered vehicle (12) including the steps of providing a service facility (44) for electric powered vehicles; providing the service facility (44) with a plurality of battery modules (32, 34) and a system for charging and recharging (claim 26) the battery modules (32, 34), as described in column 3, lines 57-61 and column 4, lines 19-28; opening the service facility to drivers owning the electric powered vehicles (12), where a driver having an electric powered vehicle (12) with a depleted battery module (32, 34) enters the service facility (44), as clearly shown in Figure 1; removing the depleted battery module (32, 34) from the electric powered vehicle (12), as described in column 3, lines 61-66; inserting a fully charged battery module (32, 34) into the electric powered vehicle (12), as described in column 4, lines 7-17; and charging the driver for the fully charged battery module (32, 34), as described in column 4, lines 28-31. Further, the electric powered vehicle of Chase, Jr. includes a battery module compartment (22), the battery module (32, 34) insertable into the battery module compartment (22) of the chassis. In the step of removing the depleted battery module (32, 34) from the electric powered vehicle (12), Chase, Jr. teaches the steps of: opening an access door (26) attached to the vehicle to expose the battery module compartment (22); and sliding the depleted battery module (32, 34) from within the battery module compartment (22), as shown in Figure 2 and as described in column 3, lines 61-66. In the step of inserting a fully charged battery module (32, 34) into the

Art Unit: 3618

electric powered vehicle (12), Chase, Jr. teaches the steps of: sliding the battery module (32, 34) including a fully charged battery (34) into the battery module compartment (22); and closing the access door (26) attached to the vehicle (12) to seal the battery module compartment (22), as described in column 3, lines 11-15 and column 4, lines 1-17.

Based on the teachings of Chase, Jr., it would have been obvious to one having ordinary skill in the art, at the time the invention was made to modify the system of Weaver et al. to include a method of replacing a battery module including the provision of a service facility to eliminate delays in operation and save time that might otherwise be lost during recharging and servicing of the batteries.

Response to Arguments

4. Applicant's arguments with respect to claims 25-27 and 29 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chaney shows an electric vehicle chassis with removable battery module and a method for battery module replacement.

Aarseth shows an electric vehicle service center and method for exchanging and charging vehicle batteries.

Merkle et al. shows an apparatus for positioning battery-operated road vehicles at battery replacement stations.

Kappei shows a mounting support for the battery box in the carriage of battery driven vehicles.

Hafer shows electrically driven vehicles.

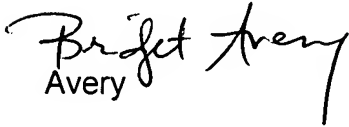
Hall et al. shows an electric propulsion motor vehicle.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

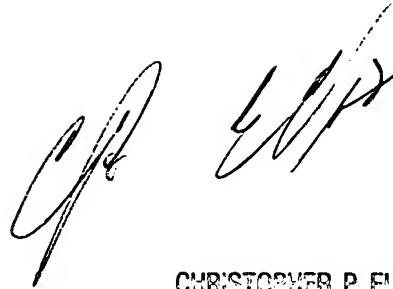
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 3618

7. Any inquiry concerning this communication should be directed to Bridget Avery at telephone number 703-308-2086.


Avery

November 15, 2004



CHRISTOPHER P. ELLIS
SUPERVISOR, PATENT EXAMINER
TELEPHONE 703-308-2086